

## Microscope Lab Part 2

### Purpose

1. Explain what stains are and why they are often used with biological materials.
2. Draw a cheek cell and identify its nucleus and plasma membrane.
3. To observe and sketch slides made with pond water

### Materials

2 Slides	Pond water
2 Cover Slips	Water
Cotton swab	pipettes
Methylene Blue	

### Method

1. Gently scrape some cheek cells from the inside of your cheek with a clean, cotton swab.

Discard your cotton swab immediately after use in the container provided.

2. Spread the scrapings in the middle of a clean slide. Wait until the slide dries before proceeding.
4. Put several drops of methylene blue on the cheek scrapings. Wait 2 minutes for the stain to take effect.
5. *Gently* rinse the methylene blue off the slide with water from a squirt bottle. (If you rinse too vigorously, you may wash the cells off, too.)
6. Use a paper towel to blot dry the bottom of the slide. Do not wipe the top!
7. There should be enough moisture on the top for you to add a cover slip. If not, add a drop of water. Gently add a cover slip.
8. Examine your cheek cells under the compound microscope.

Since the cells are still relatively transparent, adjust the aperture of the diaphragm to obtain maximum contrast.

9. Sketch the cheek cells in your science journal and label the plasma membrane and nucleus.
  - a) Draw a circle in your science journal. The circle represents the field of view.
  - b) Indicate the power of the microscope objective that you are using when you make your sketch
  - c) Sketch cells as you see them with as much detail as possible

Example:

